Immunity [*]

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Abstract

Statutory immunity provisions that limit the criminal liability of politicians exist throughout much of the modern democratic world. Though anecdotal evidence suggests that immunity promotes corruption, neither the political economy literature on accountability nor the empirical literature on the determinants of corruption has devoted attention to the immunity of politicians. A likely reason for this omission is the dearth of available data. In this paper we quantify the strength of immunity protection in 74 democracies and verify that the strength of immunity is strongly associated with corruption on an aggregate level. To our knowledge, this represents the first systematic attempt to code the strength of immunity protection for politicians and test its impact on corruption. We show both theoretically and empirically that immunity provisions add an important new dimension to the study of accountability and corruption. The incidence of corruption soars when politicians are placed above the law. This key empirical finding echoes, among others, the relationship between diplomatic immunity and parking violations, as uncovered by Fisman and Miguel (2007). Our study also parallels recent work on political protection for tax evasion in Southern Europe such as Artavanis et al. (2012).

KEYWORDS: accountability, corruption, immunity, interest groups

JEL CLASSIFICATION: K40; N40; D72; D78

1 Introduction

This paper examines statutory provisions that obstruct or limit the criminal liability of politicians – hereafter referred to as immunity – and the relationship that they have with poor governance outcomes. Laws and constitutions that provide politicians with immunity are common in modern democracies. This paper is the first to systematically document these provisions and measure the varying degrees of immunity protection for politicians across democracies around the world. Our empirical analysis reveals robust evidence that stronger immunity protection is associated with higher levels of corruption, after controlling for other determinants of corruption, including income, electoral rules, press freedom, legal origin, and trade openness, among others. Furthermore, we develop a theoretical model inspired by Maskin and Tirole (2004) with which we demonstrate how stronger immunity protection leads to higher corruption. The model suggests that unaccountable politicians can try to enhance their chance of re-election by using illegal means, namely supporting interest groups through lax law enforcement, non-collection of taxes, and other forms of favoritism; interest groups return the favor through favorable propaganda, generous campaign financing, or even outright vote-buying. Moreover, our theoretical model suggests that higher levels of immunity protection further contribute to poor governance because stronger impunity attracts dishonest people to public office.

In the second book of the *Politeia*, Plato tells the myth of Gyges, an ordinary shepherd from Lydia who found a ring that made him invisible. Gyges used the ring to gain power and influence. What would happen, Socrates' interlocutor, Glaucon, asks in analogy, if we gave such a ring to a just man? Would his character and behavior be corrupted by the impunity with which he can commit crimes when invisible?[1] Plato feared the possible temptation:

> No man can be imagined to be of such an iron nature that he would stand fast in justice. No man would keep his hands off what was not his own when he could safely take what he liked out of the market. *Plato, Politeia II, 359-360*

This paper is inspired by Plato's long-standing suspicion that human behavior changes when the threat of legal consequences is remote or non-existent. We test this theory in the laboratory of contemporary politics by studying the extent of immunity protection and its impact on corruption among a sample of 74 democracies from all continents.

Immunity as a legal institution has existed in many democracies since its inception during the French Revolution. The French revolutionary Maximilien de Robespierre described the logic underlying immunity for representatives:

> Immunity is the principle that no power may raise itself above the representative body of the

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[1]In the field of political theory, Wigley (2003) first pointed to the parallels between Plato's treatment and immunity protection for politicians.

nation; that no body may decide the fate of the representatives. If [the nation] could assemble

as a body, it would be the true judge of [the representatives].[2]

Immunity served a important purpose during the French Revolution. The judicial system and law enforcement agencies in post-revolutionary France remained under the control of the Ancien Régime. Under these circumstances, constitutional immunity guarantees shielded democratically elected representatives from politically motivated prosecution initiated by a partisan court and police systemManow (2010). Immunity subsequently helped to strengthen the independence of legislatures across Europe and supported the transition to republican government.[3]

For many modern commentators, among them Wigley (2003), Koçan and Wigley (2005), and Wigley (2009), such protections against politically motivated charges remain the key justification of parliamentary immunity today (Koçan and Wigley, 2005). However, a less sanguine interpretation of immunity provisions is conceivable. This paper argues that immunity has a pernicious effect on the quality of governance in established democracies. Immunity reduces accountability and encourages those disposed to criminal activities to run for public office, thereby producing poor governance outcomes in modern democracies.[4] Our paper provides empirical substantiation for this rather critical view of immunity.

There already exists some research supportive of such a view of immunity. For instance, Fisman and Miguel (2007) examined the effect of diplomatic immunity on parking violations in New York City and revealed a sharp decrease in such violations shortly after New York City police found a way to punish violators by removing their plates. Anecdotal evidence also suggests the presence of a close link between immunity and illegal behavior, affirming what Plato conjectured more than 2000 years ago. In Plato's native Greece, immunity protections have recently been blamed for the mismanagement of public funds in a number of cases, the most conspicuous of which involved €100 million in pay-for-play bribery payments to fifteen Greek ministers.[5] In Italy, former Prime Minister Silvio Berlusconi skillfully navigated the country's generous immunity provisions to avoid criminal prosecution and was stopped only by the Italian constitutional court. Mexican legislator-elect Julio César Godoy Toscano, who disappeared in 2009 after being charged with money laundering and having ties to one of Mexico's most powerful drug cartels, hatched an even more overt plan to exploit immunity. After 15 months spent hiding from police, Mr. Godoy Toscano managed to slip through police checkpoints and steal into the Mexican Chamber of Deputies, where he took his oath of office and, protected by immunity, revealed himself to the public.[6] In a similarly conspicuous case, Salvadoran

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[2]Quoted in Manow (2010, p.51)

[3]The term 'immunity' may refer to either those provisions that protect politicians' free speech or to those that protect politicians from criminal arrest and prosecution. The legal literature terms the former "non-accountability" protection and the latter "inviolability" protection. We limit our study to inviolability protection and use the term 'immunity' to refer exclusively to laws that provide inviolability protection.

[4]See also Maingot Q.C. (2012)

[5]See, for example, Donadio and Kitsantonis (2012) among others.

[6]See D.R. (2010)

prosecutors could do nothing when Congressman Jose Francisco Merino shot and wounded a police officer during a drunken rampage in San Salvador.[7]

Though the economics and political science literature have studied the accountability of politicians extensively, there has been virtually no systematic theoretical or empirical treatment of the role played by constitutional immunity provisions.[8] Our study aims to close this potentially important gap.

We are not the first to investigate the effect of institutions on economic prosperity. The influential book by North (1990) highlighted the role of institutions as determinants of transaction costs. Persson and Tabellini (2003) examine the economic effects of constitutions and focus on electoral rules[9] and form of government.[10] Besley and Persson (2011) examine the causes of the clustering of state institutions, violence and income. A recent book by Acemoglu and Robinson (2012) investigates formal and informal institutions and their impact on power relations and prosperity.

This paper corresponds well with this important body of research examining the economic effects of constitutional rules. IN this regard, our investigation is follows in the footsteps of Persson and Tabellini (2003), who study the effects of electoral rules or systems of government. The goal of our empirical study is to determine whether or not statutory rules that determine if and how politicians may be brought to justice for actions committed while they were in office affect the level of corruption in a country. Do politicians withstand the temptation to behave illegally when they can do so with impunity? Or is there evidence that, controlling for other determinants of corruption, more generous immunity provisions go hand-in-hand with higher levels of corruption?

Coding Immunity in Contemporary Democracies

An empirical analysis of immunity necessitates a systematic and comprehensive measure of immunity. As such a measure has not yet been developed, one of this paper's key contributions is the creation of a new and comprehensive measure of immunity protection that quantifies the degree to which politicians are

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[7]See, for example Darling (2000)

[8]An important exception is the work of Dal Bó et al. (2006) who propose a model which incorporates corruption through bribery, and conclude that granting officials immunity from charges of bribery can have an ambivalent effect on corruption outcomes.

[9]Electoral rules determine how votes in a given district or constituency translate into seats in the legislature. There is a large body of literature examining the effects that different electoral rules have on economic policy. Lizzeri and Persico (2001) argue that in majoritarian systems, where the candidate with the highest vote share wins the only seat, there is more of an incentive to target spending on a small and concentrated groups of voters.

Another issue is the size of electoral districts. Persson and Tabellini (1999) argues that larger electoral districts induce candidates to seek support from broader constituencies, whereas smaller electoral districts allow candidates to focus on winning the support of a narrower group.

There is also substantial literature on the effects of electoral rules on corruption, or "rent extraction", by elected officials. For instance, Myerson (1993) argues that the greater competition induced by proportional systems and larger electoral districts reduces the incentive for rent extraction.

[10]Form of government is generally characterized as either "presidential" or "parliamentary".

In a parliamentary system, the executive must hold the confidence of a majority of the legislature at all times. In effect, any member of a parliamentary coalition can veto any policy proposal (see Huber (1996) and Diermeier and Feddersen (1998)). Persson et al. (2000) argue that the ability to construct ad hoc coalitions leads to more targeted spending in a presidential system than in a parliamentary system, at the expense of broad spending programs. They also claim that the lack of a residual claimant in a presidential system results in a lower overall level of government spending and taxation. Persson and Tabellini (2004) investigate these claims empirically and find robust evidence that presidential systems result in smaller government.

placed above the law in 74 modern democracies.

Constitutional immunity provisions may apply to three different groups of politicians: legislators, ministers, and heads of state and government. The primary differences between various immunity regimes present themselves along the following three lines: (1) the procedure required to lift immunity, which can be more or less burdensome; (2) the duration of immunity protection, which can coincide with the term in office or extend beyond it; (3) the scope of activities covered and prosecutorial action prohibited by immunity. Our immunity scoring is based on six variables for each group of politicians - legislators, ministers, and chief executives - that reveal the aforementioned differences in the procedure, duration, and scope of immunity provisions. In total, our immunity score comprises eighteen variables that return a representative picture of the strength of the immunity regime in each country.

In order to compile data on immunity provisions in each country, we consulted written constitutions, founding documents, legislative acts, case law, statutes, and legislative rules of procedure. For jurisdictions where such information was lacking or ambiguous, we examined news reports detailing instances of public corruption and the process of prosecuting suspected perpetrators. To our knowledge, this is the first time that immunity has been studied systemically on a cross-jurisdictional basis.[11]

Empirics

After measuring the strength of immunity in each country, we regress various corruption and governance measures on our immunity score and a wide range of control variables. The empirical results reveal that the strength of an immunity regime is one of the key correlates of corruption in modern democracies. We find that the strength of immunity regime is closely associated with poor corruption outcomes after controlling for other factors that have been found to explain cross-country corruption incidence, such as income, democratic and legal tradition, electoral rules, form of government, and culture, as well as a number of economic control variables. Moreover, the negative effect of immunity on corruption outcomes that we uncover in the data does not depend upon the choice of the corruption measure; the effects are highly visible when using both perception-based and incidence-based measures of corruption as the dependent variable, which takes into consideration the concerns voiced by Treisman (2007). The results remain equally strong when we allow for non-linear effects of the covariates in matching regressions with immunity protection as a treatment variable.

Clearly, reverse causality is a potential concern that must be addressed. Corrupt politicians may choose stronger immunity protections in order to protect themselves from prosecution. The evidence, however, disputes this proposition. As we will show, immunity provisions are highly persistent over time time and are a function of the original constitutional choices made at independence. For instance, Argentina has

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[11]Though Hoppe (2011), Maingot Q.C. (2012), McGee (2001), van der Hulst (2000), Myttenaere (1998), and Geesteranus (1996) do collect information on immunity provisions in a number of jurisdictions, their efforts have been limited to qualitative analysis and focus primarily on immunity protections afforded to parliamentarians. Maingot Q.C. (2012) and van der Hulst (2000) undertake an attempt to document immunity regimes outside of Europe.

strong immunity provisions and high levels of corruption, but its rules have not changed since their inception 159 years ago. Historical contingency, not politicians' machinations, account for the observed variation in immunity rules around the world. The longevity of immunity rules seems to be the norm: In an analysis of American democracies founded before 1900, we find that the average and median ages of immunity regimes to be 148 years and 126 years, respectively. There were only 4 substantial changes to immunity regimes in the Western Hemisphere since 1900.

Theory

Our theoretical model demonstrates how immunity protection in democratic countries encourages corruption among officeholders, thereby contributing to governance outcomes that are not aligned with the broader public interest. Moreover, higher immunity protection draws dishonest individuals into politics, consistent with the anecdotes discussed earlier. In extensions of the model, we discuss how executive immunity can unravel to lower levels of authorities (e.g. immune and corrupt finance ministers may be lenient to ineffective tax collectors when they refrain from collecting taxes from industries supported by interest groups) The vast majority of the theoretical literature in economics and political science concludes that re-election is the primary mechanism of accountability in democracies. Our work suggests that immunity provisions for legislators, chief executives, and ministers constitute an important dimension of accountability that has thus far been overlooked. In particular, we analyze the link between immunity and corruption, as well as the incentives for different types of individuals to contest political office. Our model is grounded in a particularly astute observation by Myerson (2009):

> According to Xenophon, Cyrus established himself as a great political leader by cultivating a reputation for generously rewarding his captains after victory. So the essential point of his story is that a successful leader needs a reputation for reliably rewarding those who work to put him in power.

Immunity provides politicians with extra means to reward those that help put them in power. In Maskin and Tirole (2004) a politician (or any other elected official) is re-elected if his policy choices are supported by the majority of voters. We augment this model by introducing interest groups that help politicians win re-election by providing resources, such as campaign contributions, which can be useful for bribes or vote-buying or by providing good publicity (see, for example, Finan and Schechter (2012)). Interest groups provide support in exchange for rewards that may include the passage of laws favorable to these groups, non-enforcement of laws that are hostile to the interest of these groups, or favoritism towards these groups in public procurement. The expected punishment that politicians face if they are caught for corruption depends upon the strength of immunity protection.[12] Interest groups can return the favor not only by

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[12]For a comprehensive theoretical analysis of the role of interest groups in policy choice, see Snyder and Ting (2008). For empirical evidence linking clientelism and corruption, see Singer (2009).

providing resources and publicity, but also by making sure that their members vote for the politician.

This paper comprises three sections. In the first, we describe the differences in immunity protection across countries and our coding, and present a number of key stylized facts. In the second section, we study the relationship between immunity and corruption and find a strong negative relationship. In the third section, we propose a simple theoretical model that rationalizes how immunity may generate poor outcomes. Overall, our work strongly suggests that immunity provisions have pernicious consequences for governance in democratic countries.

2 Immunity Provisions in Democracies: An Overview

2.1 Historical Origins and Persistence

While parliamentarians have long enjoyed the right to speak and vote freely in parliament, limitations on the criminal liability of legislators were designed as a protection of legislative independence from the Ancien Régime during the struggles of the French Revolution.[13] The framers of the French Constitution of 1791 exceeded the conventional freedom of speech protections for parliamentarians by incorporating a further provision that restricted the liability of members of the legislature for criminal activities they may have perpetrated in a personal capacity:

> For criminal acts, [members of the National Legislative Assembly] may be seized *flagrante delicto*, or by virtue of a warrant of arrest; but notice thereof shall be given to the legislative body immediately, and prosecution may be continued only after the legislative body has decided that there is occasion for indictment.

The process of impeaching and removing executive branch members as a prerequisite to prosecution in presidential systems developed independently during the ratification of the United States Constitution. The framers of the document made a conscious decision to place the authority to remove the president and authorize his/her legal prosecution in the hands of the legislature. Just like their French counterparts, the framers of the United States Constitution feared that placing the president under the direct jurisdiction of

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[13]As applied to legislators, the concept of non-liability – freedom of speech – originated in the English Parliament. In 1397, Sir Thomas Haxey rebuked King Richard II's prodigal habits in the English Parliament. When the incensed monarch discovered Haxey's name, he orchestrated the parliamentarian's treason conviction and subsequent death sentence. While the intercession of the Archbishop of Canterbury saved Haxey's life, Parliament was nevertheless concerned with the case's implication for legislative independence in England; following Richard II's overthrow in 1399, Parliament forced his successor to annul the judgment against Haxey and restore his estate (Chafetz, 2007, p. 69). Haxey's Case (1397) was the first in a number of assertions of parliamentarians' right to freedom from liability for speech uttered in Parliament (Chafetz, 2007, p. 69). Parliamentarians ultimately codified this basic form of immunity into the English Bill of Rights three centuries later: "the freedom of speech and debates and proceedings in Parliament ought not to be impeached or questioned in any court or place out of Parliament." The English Parliament's assertion was subsequently adopted in a number of democratizing jurisdictions and was spread throughout the world through English colonial rule. It was later expanded to apply to protect other public officials from recrimination for words spoken or votes taken in their official capacity. This protection – which we refer to as agency protection – is now "not only relatively homogenous but also a highly stable principle throughout the world," (van der Hulst, 2000, p. 66). Agency protection may not generally be waived, and in some jurisdictions extends beyond speech uttered in Parliament to include written work, debates, or other forms of expression that may or may not be disseminated beyond the confines of the legislature.

the judiciary without legislative consent would allow for politically motivated charges to interfere with the functioning of the executive branch of government.[14] In contrast to the approaches to politicians' criminal responsibility in France and the United States, England did not incorporate such protections for elected officials and relied instead on the conventional judicial process to discipline these actors in criminal cases. Following the French and American Revolutions, variations on these approaches to immunity emerged and spread throughout the world, the result being a patchwork of diverse immunity regimes throughout the modern world.

Immunity regimes are highly persistent over time, as we will demonstrate below. In the Americas, the mean age of current immunity provisions in close to 150 years. Since 1900 we count only about 4 substantial changes to immunity regimes in all democratic countries in the Western Hemisphere. In the few countries where substantial revisions were made, these changes often followed constitutional revisions made under authoritarian regimes. These changes were subsequently repealed when the authoritarian leaders were ousted from power. General Pinochet, for example, revised the Chilean Constitution to include lifelong immunity for former presidents in 1980; this change was swiflty repealed when the country returned to democratic rule.

As a result, the differences in immunity protection observed today reflect, by and large, the original choices made by the framers of contitutions. The observed variation in immunity regimes appears to be first and foremost a function of historically contingent paths taken by countries early in their constitutional history. Early institutional choices explain much of the observed variation in immunity regimes today. Analogous to Persson and Tabellini (2003) we infer from this time persistency of constituional provisions that reverse causation is unlikely to be a major issue for the empirical analysis.

2.2   Contemporary Immunity Regimes

A casual reading of different constitutions reveals substantial differences in the immunity regimes of democratic countries. At one side of the spectrum stand countries without immunity protection, exemplified by the United Kingdom. While members of the British Parliament and British ministers may speak or vote without the threat of legal retaliation, there exist no procedural obstacles that impede or limit the criminal prosecution of these political actors. At the other extreme lie countries with strong immunity regimes, exemplified by Paraguay. The Constitution of Paraguay (1992) stipulates that any arrest or prosecution of a member of the legislature must be authorized by a two-thirds majority vote in the legislative chamber to which the legislator belongs. Should prosecutors wish to take action against a minister or the president, the lower house of the legislature must first impeach the politician by a vote of two-thirds, followed by a two-thirds majority vote for removal in the Paraguayan Senate. It is within the sole purview of the Senate to determine whether the removed politician should be referred to a competent court, which may only then

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[14]See Alexander Hamilton, *The Federalist*, Number 65 (1788).

proceed with criminal prosecution. In addition to these substantial impediments to prosecution, Paraguayan law grants former presidents special legal status through which they retain the procedural protections from prosecution afforded to Paraguayan legislators for the remainders of their lifetime.

Most contemporary democracies employ immunity regimes that lie somewhere between the two extremes of the United Kingdom and Paraguay. Macedonia approximates the delineation of a middle way; Macedonian legislators and ministers enjoy immunity from criminal prosecution for the duration of their mandate, but this immunity may be waived by a simple majority vote in the legislature. These differences among the approaches to politicians' immunity in the United Kingdom, Paraguay, and Macedonia provide evidence of considerable cross-jurisdictional variation in the strength and nature of immunity regimes that exists throughout the modern democratic world. To this date and to the best of our knowledge, no attempt has been made to systematically compare immunity regimes in contemporary democracies; we continue by introducing a comprehensive coding of the differences in cross-country immunity regimes.

2.2.1 Immunity of Legislators, Ministers, Chief Executives

Immunity protections may apply to three different groups of politicians: legislators, ministers, and chiefs of state and government. This distinction is crucial; while some countries protect only legislators from prosecution, others may extend immunity to high-ranking officials in the executive branch. We derive an aggregate measure of immunity protection that incorporates the strength of immunity protections enjoyed by all three groups of officials; while it could be informative to examine the protections offered to each individual group, a broad measure that incorporates all three has two distinct advantages.

First, a wider coverage of immunity provisions better captures the interplay among different political actors. It is not always possible to identify the extent to which immunity provisions that insulate one set of political actors from prosecution may also affect the effective immunity enjoyed by another, distinct set of political actors. The likelihood of malfeasant behavior among members of the executive branch may, for example, depend to some degree on the strength of their country's legislative immunity regime. Second, governance indices do not typically measure performance among the individual branches of government, but rather throughout the broader public sector. A comprehensive coding of immunity protections that includes legislators, ministers, and chief executives most adequately measures the degree to which a given society has chosen to place all of its political actors above the law and therefore best corresponds to aggregate governance indicators.

In addition to the coverage of different groups of politicians, the key differences between immunity regimes present themselves along the following lines: (1) the procedure required to lift immunity which can be more or less burdensome; (2) the duration of immunity protection which can coincide with the political office or extend beyond it; (3) the scope of activities covered and legal actions prohibited by immunity. We will

discuss each in turn.

2.2.2 Procedure

Perhaps the most important factor in determining the degree to which politicians are insulated from criminal responsibility is the issue of procedure. Immunity protection, in all jurisdictions where it exists, may be waived if some procedural requirement is fulfilled. Yet these procedures differ significantly between countries. Jurisdictions with strong immunity protection employ a number of burdensome procedural obstacles that must be overcome before a politician may be prosecuted; these obstacles are few and undemanding in jurisdictions with weak immunity protections.

In the overwhelming majority of jurisdictions that protect their legislators with immunity, this protection may be waived if either a supermajority or simple majority of legislators in legislative house to which the legislator in question belongs votes to remove the suspect's immunity. In other jurisdictions where immunity is not as robust, the procedure for waiving immunity requires the consent of only a legislative committee, the cabinet, the chief executive, or the chief justice of an appellate court. Only when this procedural requirement is discharged may the legislator in question be arrested or prosecuted. The immunity of ministers and chief executives is lifted in the same way as that of legislators, though the assent of majorities in two legislative houses is occasionally required to authorize prosecution in countries with bicameral legislatures.[15]

2.2.3 Duration

In addition to the procedure required to waive immunity, immunity provisions may also differ from one another with respect to the time during which they apply. Duration may affect the level of immunity protection in two different ways. The majority of jurisdictions employ immunity protections that apply solely to the office in question, not to the individual. Consequently, immunity in these jurisdictions expires at the end of a politician's term in office. Other jurisdictions, however, continue to protect politicians from prosecution after their term in office has expired, as is the case of former presidents in Paraguay, who enjoy the same immunity as legislators for the remainders of their lifetime.

In addition to the issue of prospective immunity, some jurisdictions with legislative immunity provisions, such as Norway, choose to protect legislators from criminal responsibility only while the legislature is in session, while others, such as Germany, provide legislators with immunity for the full duration of the legislative mandate. This variation only applies to legislative immunity, as the procedural protections described above always insulate ministers and chief executives from criminal prosecution for the full duration of their term in office.

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[15] In some jurisdictions, constitutional or other legal provisions stipulate that the offices of minister and chief executive are inviolable; ministers and the chief executive may not be prosecuted under any circumstances so long as they continue to hold office. However, there exists in these jurisdictions some process of removal from office, after which the individual may be prosecuted. In such cases, the process of removal mimics the various ways in which immunity may be lifted that are described in this section.

2.2.4 Scope

Immunity provisions in different jurisdictions provide politicians with varying degrees of coverage. Coverage may affect immunity in two ways. First, immunity provisions may limit the application of immunity to certain crimes, such as those with some relation to a politician's official duties. The Greek ministerial immunity provision is representative of such laws:

> No prosecution against, no questioning or preliminary questioning of [present or former members of the Government] ... for acts carried out by commission or omission in the discharge of their duties shall be permitted, before Parliament has decided on the matter. (Constitution of Greece, Article 86, Section 2)

Alternatively, these provisions may extend further and protect against prosecution for the commission of common crimes wholly unrelated to a politician's official duties, such as the legislative immunity clause in the Constitution of El Salvador, which gives legislators protection for all serious crimes, irrespective of whether they have anything to do with a legislator's duties:

> From the day of their election until the end of the period for which they have been selected, deputies may not be judged for serious crimes that they commit except for those cases in which the Legislative Assembly declares in advance that there are grounds for prosecution...[16] (Constitution of El Salvador, Article 238)

While both provisions provide politicians with protection, legislators in El Salvador are protected from repercussions of a wider range of criminal activities than are ministers in Greece.

Second, the range of prosecutorial activities that immunity provisions proscribe differs from one jurisdiction to another. Some jurisdictions prohibit only the arrest and detention of a legislator, while others extend protection to prevent the opening of judicial proceedings, as well. Unlike legislators, ministers and chief executives, where protected by immunity, may generally not be arrested, detained, or prosecuted without the fulfillment of the appropriate procedural requirement.

2.2.5 Further Differences

The preceding discussion reveals three key differences between the immunity provisions that apply to legislators and those that apply to ministers and chief executives. The procedure involved in waiving the immunity of legislators is confined to the decision of one legislative house, while the procedure involved in waiving the immunity of ministers and chief executives may require the consent of two legislative houses. With respect to duration, legislative immunity sometimes only applies while the legislature is in session,

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[16]Translation is the authors' own.

in which case the legislator in question may be prosecuted and detained during recesses, while ministerial and chief executive immunity provisions always apply for the full duration of the politician's term in office. While ministers and chief executives are always protected from arrest and the opening of judicial proceedings when they enjoy immunity, legislative immunity in some jurisdictions protects legislators only from arrest, in which case they may still be subject to judicial hearings.

3   Quantifying Immunity Regimes

3.1.1   Immunity Scoring

In this section, we quantify the differences in immunity regimes between countries outlined in the preceding section. We then use the resulting immunity scores to test the statistical relationship between immunity rules and corruption outcomes. Our immunity scoring is based on six variables for each group of politicians - legislators, ministers, chief executives - that address differences in procedure, duration, and scope, as detailed above. In total, our immunity score comprises eighteen variables that return a representative picture of the strength of the immunity regime in each country. Table 1 provides an overview of the components of the immunity score. The first six variables apply to legislators,[17] the second six to ministers, and third six to chief executives.[18] In all cases, a value of "1" indicates that the protection is provided by the law, while a value of "0" indicates that no such protection from criminal liability exists in the relevant jurisdiction. We calculate the composite score by taking the arithmetic mean of the resulting eighteen variables. We also experimented with various weighting schemes, as detailed below. The dimensions of immunity that our scoring model captures are the following:

Table 1: Immunity Coding

Category	Question
Legislative Immunity	
Procedure	1. Is there a procedural impediment that restricts the detention of a legislator on criminal charges?
	2. Is the assent of a simple majority of legislators in one legislative house necessary to authorize the detention of a legislator on criminal charges?
	3. Is the assent of a supermajority of legislators in one legislative house necessary to authorize the detention of a legislator on criminal charges?

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[17]Where rules governing immunity protection differed among the two houses of a bicameral legislature, as they do in Germany, we assumed that the rules applicable to the lower legislative house were of greater importance and disregarded those provisions applicable only to the upper legislative house.

[18]In governments where the functions of head of state and head of government are exercised by two different individuals, we assumed the chief executive to be the prime minister or equivalent in parliamentary democracies and the president in semi-presidential democracies.

Duration	4. Do immunity provisions continue to protect legislators after their term in office expires?
Scope	5. Do immunity provisions protect legislators from prosecution related to the commission of common crimes unrelated to their official duties? 6. Do immunity provisions protect legislators from judicial proceedings
Ministerial Immunity	
Procedure	7. Is there a procedural impediment that restricts the prosecution of a minister on criminal charges? 8. Is the assent of a simple majority of legislators in one legislative house necessary to authorize the prosecution of a minister on criminal charges? 9. Is the assent of a supermajority of legislators in one legislative house necessary to authorize the prosecution of a minister on criminal charges? 10. Is the assent of legislators in two legislative houses necessary to authorize the prosecution of a minister on criminal charges?
Duration	11. Do criminal immunity provisions continue to protect ministers after their term in office expires?
Scope	12. Do criminal immunity provisions protect ministers from prosecution related to the commission of common crimes unrelated to their official duties?
Chief Executive Immunity	
Procedure	13. Is there a procedural impediment that restricts the prosecution of the chief executive on criminal charges? 14. Is the assent of a simple majority of legislators in one legislative house necessary to authorize the prosecution of the chief executive on criminal charges? 15. Is the assent of a supermajority of legislators in one legislative house necessary to authorize the prosecution of the chief executive on criminal charges? 16. Is the assent of legislators in two legislative houses necessary to authorize the prosecution of the chief executive on criminal charges?
Duration	17. Do criminal immunity provisions continue to protect the chief executive after his/her term in office expires?
Scope	18. Do criminal immunity provisions protect the chief executive from prosecution related to the commission of common crimes unrelated to his/her official duties?

Questions 1 – 3 code the differences in the procedural requirement necessary to waive legislative immunity. Question 4 addresses the duration of immunity protection and distinguishes between regimes in which legislative immunity expires at the end of the legislative term and those in which immunity continues

to apply after the term in office has concluded; legislators in the latter enjoy substantially more certainty that they will not be prosecuted. Questions 5 and 6 refer to the scope of legislative immunity. Question 5 examines the types of crimes covered by immunity protection, and question 6 indicates whether immunity also protects legislators from judicial proceedings relating to suspected criminal activity.

The ways in which we quantify the strength of ministerial and chief executive immunity provisions are identical to one another, as immunity provisions applicable to ministers behave in the same way as those applicable to chief executives. Questions 7 – 10, as well as questions 13 – 16, code these essential differences in the procedural difficulty of waiving immunity provisions for these executive branch members. Procedural requirements for waiving executive branch members' immunity may involve the assent of two legislative houses. Consequently, there exists one supplementary procedural question for ministers and chief executives that does not exist for legislators. Questions 11 and 17 code immunity provisions that extend beyond the term in office.

Some jurisdictions afford politicians immunity from prosecution for criminal activities that carry a penalty of incarceration for a period of less than a stipulated number of years; a politician involved criminal activity that carries a penalty of incarceration that is greater than or equal to the stipulated number of years no longer enjoys immunity. For example, the relevant provision in the Constitution of Slovenia (1991) states:

> "No deputy may be detained nor, where such deputy claims immunity, may criminal proceedings
> be initiated against him without the permission of the National Assembly, except where such
> deputy has been apprehended committing a criminal offense for which a prison sentence of over
> five years is prescribed." (Article 83, Section 2)

As the penalties for various public corruption offenses is found primarily in criminal codes and sentencing guidelines, the retrieval of which was not possible for some jurisdictions, we assume that public corruption is an offense for which the punishment will involve more than three years in detention. Accordingly, we treat Slovenia as providing immunity protection for its legislators. Furthermore, some jurisdictions, such as Norway, provide immunity to their legislators only while the legislature is in session. As this leaves open the possibility that the legislator may be detained or prosecuted during recesses, we assume that these jurisdictions provide no effective immunity protection for their legislators.

3.2   Data Sources

In order to compile data on immunity provisions in each country, we began by examining the written constitutions for each country for provisions detailing the relevant immunity provisions. For countries without written constitutions and those where constitutional language was vague or deferred to legislation, we consulted founding documents, csae law, statutes, and legislative rules of procedure. For situations in

which immunity provisions were unavailable or unclear in all of these sources, we consulted the "PARLINE" database of the Inter-Parliamentary Union, as well as existing literature summarizing immunity provisions, specifically Hoppe (2011), Maingot Q.C. (2012), McGee (2001), van der Hulst (2000), Myttenaere (1998), and Geesteranus (1996). In some cases, we also examined news reports of instances of public corruption, which revealed the obstacles that confront prosecutors who attempt to bring charges against politicians with immunity protections.

3.3 Country Sample

We limit our immunity scoring to democratic countries. As Wigley (2003, 2009), Koçan and Wigley (2005), and Dal Bó et al. (2006) suggest, immunity provisions may function differently in authoritarian or semi-authoritarian contexts where a proper division of powers does not exist. Consequently, we code immunity provisions for only those nations with a score of 6.00 or higher on the Economist Intelligence Unit's "Democracy Index". This covers all countries that the index classifies as "full democracies" or "flawed democracies," and excludes "hybrid" and "authoritarian" regimes. These classifications correspond closely to alternative regime classifications such as those in the Polity database. We further disqualify from our sample those countries with "hybrid regimes" in one or more of the five years since the index was first published. The countries that meet these criteria constitute a diverse sample in a number of respects. Geographically, 7 countries lie in Africa, 14 in Asia and Oceania, 35 in Europe, 8 in North America and the Caribbean, and 10 in South America. Economically, 32 countries qualify as advanced economies according to the International Monetary Fund. Legally, 19 employ common law systems and 55 civil law systems. Politically, 29 employ presidential or semi-presidential systems, while 45 are parliamentary democracies.

3.4 Summary Statistics

The immunity index reveals considerable cross-jurisdictional variation in the strength of provisions that limit the criminal liability of politicians. The mean score across 74 countries is 0.33, with a maximum of 0.92 and a standard deviation of 0.24. The immunity scores are not closely correlated to either income (correlation coefficient: -0.069) or the level of democracy (correlation coefficient: 0.072). The coefficients are insignificant by a wide margin in both cases. The table also reveals significant variation in the approaches to the immunity of legislators, ministers and chief executives. As detailed above, our immunity index is the mean of the individual scores. Figure 3.1 demonstrates the geographic variation in immunity provisions in the jurisdictions studied. As the map makes clear, Latin American countries generally have the highest levels of immunity protection, followed by Southern and Eastern European countries. Many Latin American countries were early adopters of the relatively strong legislative immunity provisions in the French tradition. These countries were further influenced by presidential democracy developed in the United States and adopted that

country's approach to presidential immunity. The combination of both systems resulted in strong immunity regimes throughout South and Central America. By contrast, countries that were influenced by the English parliamentary tradition in generally have the weakest levels of immunity protection. The remaining countries generally lie between the two extremes. The United States, for instance, has comparatively low levels of legislative and ministerial immunity protection, but a very high level of immunity for the president. It is also noteworthy that Southern and Eastern European countries tend to have more generous immunity provisions than their Northern and Western European neighbors. Overall, our immunity scoring, which represents the first effort to systematically measure the differences in immunity protections across jurisdictions, reveals substantial variation in immunity regimes across countries.

Table 2: Immunity Index: Summary Statistics

Variable	Mean	Std. Dev.	Min.	Max.
Legislative Immunity Score	0.412	0.345	0	1
Ministerial Immunity Score	0.22	0.258	0	0.75
Immunity of Chief Executive Score	0.345	0.295	0	1
Immunity Index Score	0.325	0.245	0	0.917
Number of observations		74		

Figure 3.1: Immunity Index scores in 74 democracies

Legend:

|	
▨	0.00 - 0.24
▨	0.25 - 0.49
▨	0.50 - 0.74
■	0.75 - 1.00
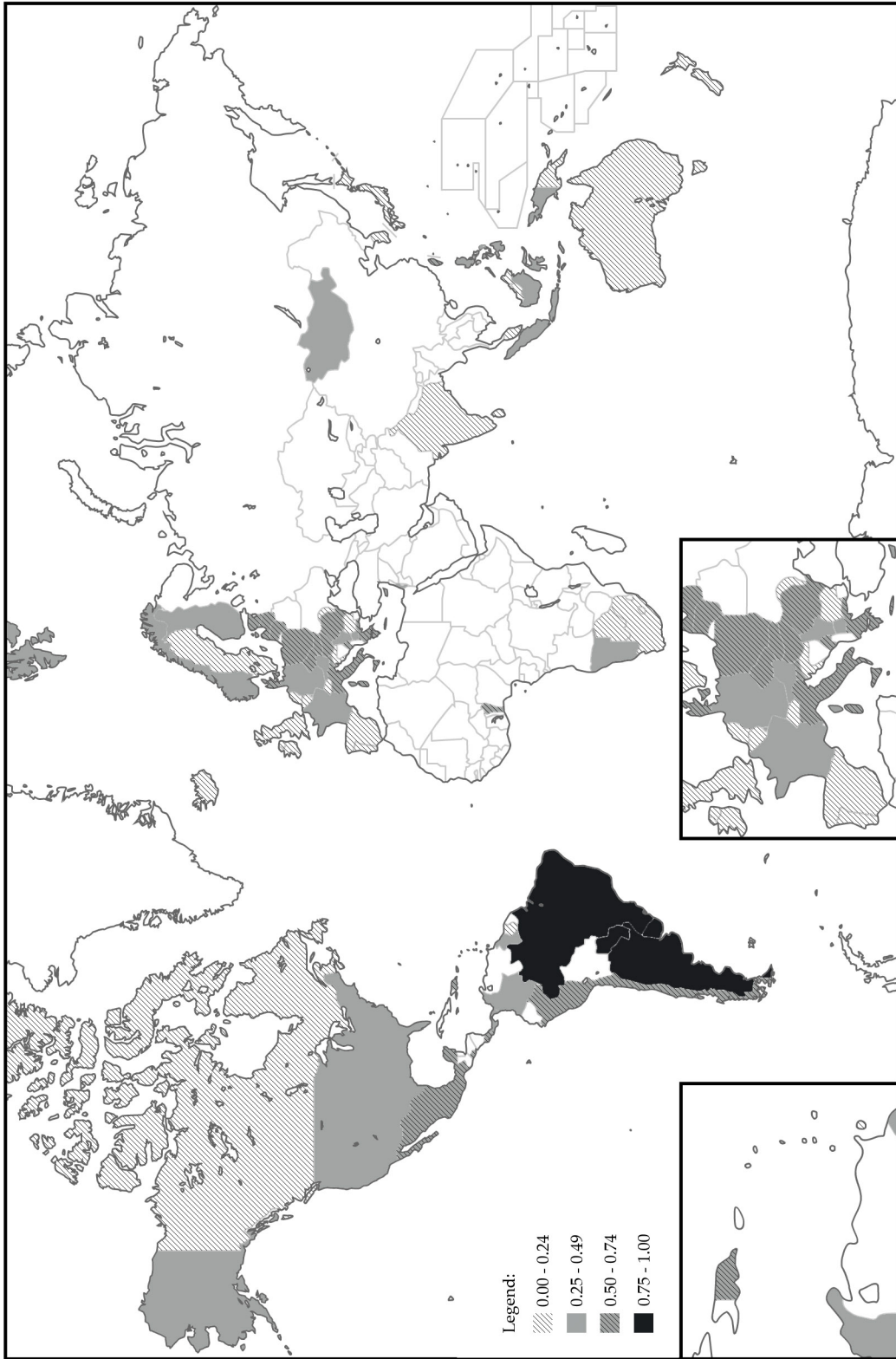
3.5   Persistence of Immunity Regimes

We argued above that immunity regimes are highly time persistent, and that the differences in immunity protection observed today primarily reflect the insitutional choices made very early in a country's history. Though tracing the history of immunity provisions for each of the countries in our sample is a highly complex task, we are able to test the time persistence of immunity regimes in an important subsample of modern democracies in the Americas. Most of the countries in North and South America became independent within in the first half of the 19th century, but adopted very different immunity regimes for politicians. We can thus ask whether these original differences remain present in the data today.

We proceed about this inquiry in three steps. First, we identify the first democratic post-independence constitutions for 18 countries in the Americas.[19] Most of these constitutions entered into force in the nineteenth century. Second, we screen these founding documents for immunity provisions and code them using the methodology described above. Third, we compare the historical immunity scores to the current immunity scores in an attempt to gauge the degree to which these regimes persist over time.

The results from this exercise dovetail nicely with the argument made above that changes to immunity regimes are infrequent events. Current immunity regimes are highly correlated with the immunity provisions chosen at the time of the first constitution after independence. The pairwise correlation coefficient is 0.87 and statistically highly significant. The correlation plot gives clear indications that the temporal variation of immunity regimes in the Americas was very small over the past 150 years. By and large, today's immunity provisions seem to follow the historical choices made at independence. This time persistence of immunity regimes is reassuring in the sense that today's corruption levels are unlikely to be a key driver of cross-country variation in immunity regimes.

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[19]Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, El Salvador, Guyana, Jamaica, Mexico, Panama, Paraguay, Peru, Suriname, Trinidad, United States, Uruguay.
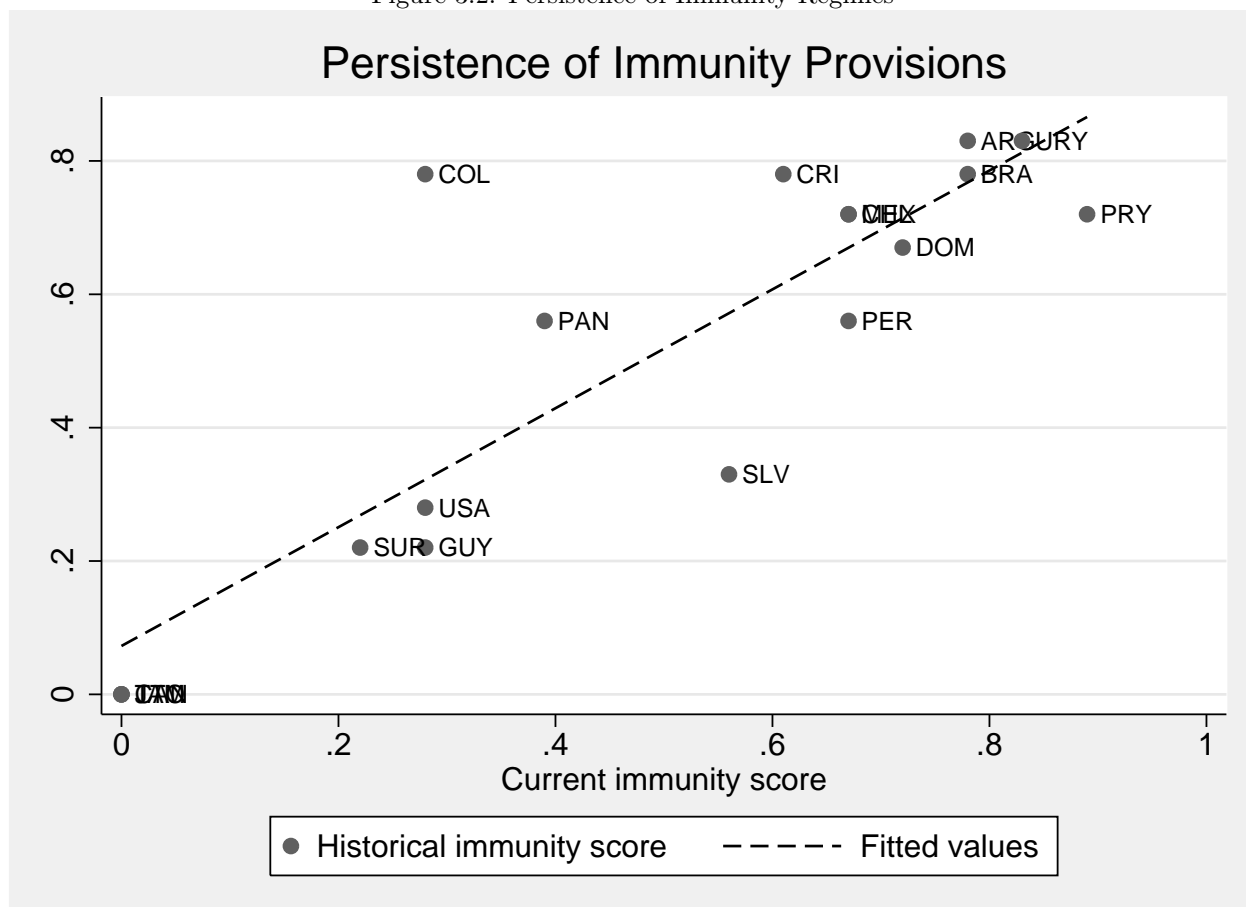
4 The Empirics of Immunity and Corruption

This section empirically examines the relationship between the strength of immunity protection and corruption. We uncover a strong positive relationship between immunity and corruption at the macro level. This section first examines the determinants of corruption before proceeding to the empirical analysis and matching regressions.

4.1 Determinants of corruption

Corruption can be defined broadly as the "misuse of public office for private gain" (Rose-Ackerman, 1999) or as an "an act in which the power of public office is used for personal gain in a manner that contravenes the rules of the game" (Jain, 2001). In practice, such misuse of public office occurs in many different ways. Corruption covers a wide spectrum reaching from extorting bribes for building permits or utility access to large scale schemes through which political elites plunder state resources for personal gain. It therefore comes as no surprise that measuring corruption has been a topic of much debate in the empirically literature (Treisman, 2007). Given the emphasis of this paper on the effects of immunity for politicians, we concern

ourselves with *systemic* corruption on a high political level than *petty* incidences of bribe extortion. Our empirical efforts reflect two different important strands in the empirical literature.

First, we aim to quantify how constitutional rules governing the immunity of politicians shape economic outcomes. This approach follows in the footsteps of the important research in comparative political economy by Persson and Tabellini (2003), who studied the effects of constitutional rules on economic policymaking and performance in great detail. Our study must confront the same empirical hurdles. Just as electoral rules (majoritarian/proportional) and forms of government (parliamentary/presidential), immunity rules tend to be highly persistent over time. Some recent attempts at changing immunity provisions (f.i., in Italy under Prime Minister Berlusconi) notwithstanding, there are very few immunity experiments that we could exploit to identify the effects of changes in immunity provision on corruption outcomes. As in much of the literature on constitutional rules, we are therefore left with cross-sectional variation and the statistical challenges this brings. As Persson and Tabellini (2003) note, the stability of constitutional rules means that reverse causation is unlikely to be a major issue. We have also shown above that immunity rules are highly persistent over time. Reverse causality in the sense that today's corruption levels are a driving force behind immunity provisions is not a major concern in our context. However, other forms of simultaneity bias warrant caution with regard to the causal interpretation of the correlations we present below.

Second, our analysis adds to the comparative literature on the determinants of cross-country corruption.[20] The existing literature has already considered a large number of explanatory variables. While a substantial body of empirical literature exists, to the best of our knowledge the effects of immunity rules have not yet been studied empirically. As there seems to be at least a *prima facie* case that the potential of corruption *could* be greater when officials are withdrawn from judicial prosecution, we aim to investigate whether this is indeed the case.

The key question is whether immunity protection for politicians emerges as a statistically and economically significant factor, after controlling for the key determinants of corruption that have been identified in the literature. Our baseline specification builds on an emerging consensus about the cross-country determinants of corruption. The construction and sources of the variables used can be found in the appendix.

There is broad consensus that there exists a close association between the income level, the overall quality of governance and corruption outcomes (Lambsdorff, 2006). High income countries tend to have less corruption. In addition, we have to control for a number of additional variables that have been found to be associated with corruption outcomes. These can be broadly grouped into (1) political, legal and institutional factors, (2) demographic and geographic factors, and (3) economic factors. Hence, in addition to the log of GDP per capita, our baseline set of regressions we will consider the following variables:

- Political and Institutional Factors. *Democracy*: the de facto degree of democracy and electoral account-

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[20]Excellent surveys can be found in Lambsdorff (2006) and Treisman (2007)

ability may be negatively related with corruption (Treisman, 2007). We use the Polity II democracy score. *Presidentialism*: factors related to the form of government are often seen as important influences of the behavior of politicians and voters (Panizza, 2001; Persson et al., 2003). *Press freedom*: following Brunetti and Weder (2003), Chowdhury (2004), Lederman et al. (2005), Suphachalasai (2005), and Freille et al. (2007), we control for the potentially corruption deterring effects of a free press. We use the Freedom of the Press index compiled by Reporters without Borders. *Legal system*: a particular concern in our context is that immunity regimes differ between different legal origins. Common law countries tend to have lower aggregate immunity protection on average although large differences exist between parliamentary and presidential common law countries. To disentangle the effects of immunity rules from other differences relating to legal origin, we control for different legal systems (Porta et al., 2008). *Federalism*: The question whether federal organization of the state is associated with better or worse corruption outcomes has been studied previously, but remains a debated issue (Treisman, 2000). *Electoral rules*: The seminal work by Persson and Tabellini (2003) has pointed to the important effects of different electoral systems on economic outcomes, including corruption. We control for these effects by including a dummy variable for majoritarian electoral systems which are expected to lead to better control of corruption.[21]

- Demographic, Cultural and Geographic factors. *Ethnic fractionalization*: in a large number of studies, ethnic fractionalization has been found to correlate positively with higher corruption and poor governance as studied by Lederman et al. (2005), Suphachalasai (2005), Alesina et al. (2003), Herzfeld and Weiss (2003), Treisman (2000), La Porta et al. (1999), Easterly and Levine (1997), and Mauro (1995). *Religion and culture*: Whether religious beliefs are associated with differences in corruption remains a debated issue. As part of our robustness checks we also control for the share of Protestants and Catholics in the population. *Regional factors*: in addition, we consider common drivers of corruption for countries clustered in the same geographical (and often cultural) neighborhood. Regional dummies were coded for Arica, Asia, Europe, South America and North America.

- Economic Structure. *Trade openness*: the impact of trade openness on corruption was explored by Gurgur and Shah (2005), Brunetti and Weder (2003), Persson et al. (2003), Fisman and Gatti (2002), Bonaglia et al. (2001), and Fréchette (2006). We control for trade openness using the sum of imports and export over GDP. *Raw material dependence*: high dependence on raw material exports is often associated with higher levels of corruption as studied by Herzfeld and Weiss (2003), Tavares (2003), Bonaglia et al. (2001), and Fréchette (2006). We develop a proxy for dependence on raw material exports by looking at the share of oil exports in total exports.

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[21]The appendix contains a detailed list of the data and sources used.

With respect to the measurement of corruption, we rely on the efforts of organizations such as the World Bank's Control of Corruption Index from the World Governance Indicators and the Corruptions Perceptions Index provided by Transparency International. Both institutions produce quantitative indices of cross-country differences in corruption based on survey data. Treisman (2007) has pointed to the differences between perception and incidence-based indicators of corruption.[22] We take this point seriously and corroborate our findings with regressions using incidence-based corruption indicators.

We regress corruption indices on the immunity provisions that we presented above and control for the other factors that have been considered by previous empirical studies. Throughout the following analysis higher values for the dependent variables indicate more corruption. Whenever the ordering was inverse, we inverted the scoring accordingly for ease of interpretation of the results. We also test the robustness of benchmark results against a variety of different corruption indicators such as the corruption index contained in the International Country Risk Guide (ICRG) and various corruption measures ("diversion of public funds"; "irregular payments and bribes") provided by the World Economic Forum (WEF). Finally, we use principal component analysis to extract the largest possible variance from the data. As there is no random assignment, our analysis, like the rest of the empirical literature on corruption, should not be treated as causal. We further develop this issue below. As our baseline model, we estimate the following cross-sectional regression using OLS:

$$Corruption_i = \alpha + \beta Immunity_i + \gamma \mathbf{X}_i + \epsilon_i,$$

The coefficient β will be the main object of study and the goal will be to investigate whether differences in immunity regimes are informative for corruption outcomes. We control for the other possible factors in the form of additional variables in the vector $\mathbf{X}$. Our main control variables are income, regime type, legal origins, press freedom and a number of economic variables. The error term u_i is assumed to be well behaved. We develop immunity scores for 74 democracies, but some control variables are not available for all countries. In most estimations we can use data for approximately 65-70 countries.

4.2 Empirical analysis

In Figure 4.1, we begin our empirical analysis with two partial correlation plots. The scatter plots display the relationship between the strength of immunity and the level of corruption in a given country after removing the effects of income and the level of democracy. We use both the "Control of Corruption" indicator from the World Bank as well as the Transparency International "Corruption Perceptions Index."Both indicators yield virtually identical results. The visual impression sends a clear message: when controlling for income levels and democracy, there appears exists a strong negative relationship between immunity and corruption.

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[22]For a discussion of the relative strengths and weaknesses of perception and incidence based indicators, see Treisman (2007).

While it remains possible that the correlation is driven by third factors, this strong relationship remains noteworthy.

Figure 4.1: Immunity of politicians and corruption
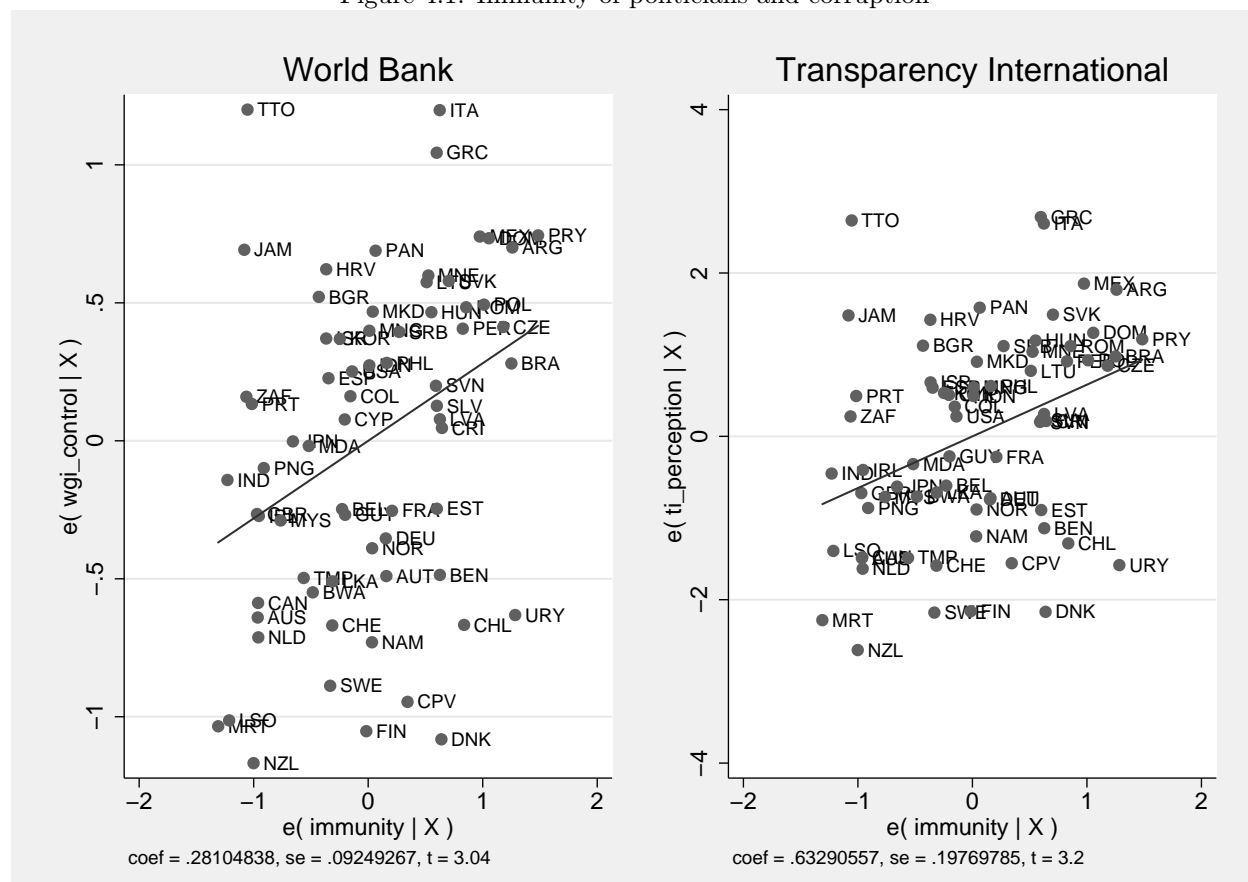
Notes: Partial correlation plot controlling for income per capita (log) and democracy. See text.

In a next step, we turn to formal regression analysis. In table 3 we start by regressing the World Bank's "Control of Corruption" measure on income and immunity. In models (2-5) we then subsequently add the various controls discussed above. Our overall results are well aligned with the empirical corruption literature. As expected, both higher income levels and more democracy are associated with less corruption. We also confirm that a free press tends to go hand in hand with less corruption (higher values here indicate more restrictions on the freedom of the press). Presidential systems tend to have better corruption control although the results are not always statistically significant. By contrast, we find little positive effect of majoritarian electoral rules on corruption. Common law countries tend to have lower corruption on average, but the effects are not significant. As expected, a high share of commodity exports in total exports worsens corruption, but we find no statistically significant effect of openness to trade. It is important to keep in mind here that our sample consists of democracies only. In light of the literature it seems possible that the effects of trade openness appear stronger in samples that include authoritarian regimes in developing countries.

The main insight from table 3 is that none of the additional control variables affects the important role played by immunity protection for corruption. Throughout the regressions, the immunity measure is significant at either the 99% or the 95% level. Neither the inclusion of controls for legal origin nor economic and regional controls affect the relationship. Immunity regimes are closely associated with corruption levels in contemporary democracies. It appears that politicians have a difficult time withstanding the temptation of being above the law.

In table 4, we repeat these regression using the alternative corruption measure from Transparency International. The results are very similar and only serve to reinforce the key message from table 3 . If anything, the statistical significance of the immunity measure rises and confirms the robustness of the relation. The other coefficients are stable as well.

In table 5 we run robustness checks with different corruption measures and the first principal component of all the eight corruption indices that we have collected. These include the ICRG corruption index (1), and the "diversion of public funds" (2) and the "irregular payments and bribes" (3) measures from the World Economic Forum. In model (4) the dependent variable is the first principal component of all the corruption and governance measures considered here. In model (5) we use an incidence based corruption measure – payment of bribes – as proposed by Treisman (2007). All of these results are again reassuring for our main hypothesis that exempting politicians from prosecution tends to be related with poorer governance outcomes. Next to income and the freedom of the press, the immunity regime clearly appears as one of the key correlates of corruption in today's democracies. While it remains entirely possible that some other factor is the true cause for this observed relation, in light of our rich right-hand-side, we can say with some certainty that it is unlikely to be related to the regime type or the degree of democracy, legal origin or wider regional/cultural factors.

In table 6, we add another set of additional control variables that have been discussed in the previous literature. The first two additional controls relate to the federal or centralistic organization of the country and the degree of ethnic fractionalization. Both have been found to correlate with worse corruption outcomes (Treisman, 2000). We also consider the possibiity that religion, presumably through its influence on culture and trust, can play a role for aggregate corruption outcomes. We therefore control for the share of Protestants and Catholics in the population. As before, our primary objective is not to confirm or reject ideas about deeper cultural determinants of economic behavior; we are merely interested in the question whether immunity protection remains closely associated with poorer corruption outcomes after including additional controls. As can be seen from the table 6, the overall result is reassuring. Neither federalism nor the degree of ethnic fractionalization affect the size or significance of the immunity variables in a meaningful way. There is some evidence, however, that federal regimes have slightly better corruption control although the effect is not always significant at standard levels. Ethnic fractionalization is associated with worse corruption outcomes,

Table 3: Immunity and corruption - World Bank Index

	(1)	(2)	(3)	(4)	(5)
Immunity	0.257***	0.281***	0.339***	0.289***	0.222**
	(0.0935)	(0.0925)	(0.121)	(0.0966)	(0.110)
Income	-0.743***	-0.588***	-0.578***	-0.415***	-0.529***
	(0.0672)	(0.0815)	(0.0817)	(0.0858)	(0.0990)
Democracy		-0.182***	-0.207***	-0.142***	-0.146***
		(0.0598)	(0.0659)	(0.0533)	(0.0519)
Presidential system			-0.0624	-0.274*	-0.200
			(0.162)	(0.144)	(0.161)
Majoritarian Electoral System			0.417*	0.246	0.0720
			(0.243)	(0.202)	(0.204)
Common law system			-0.109	-0.266	-0.216
			(0.237)	(0.196)	(0.209)
Press freedom				0.485***	0.452***
				(0.0908)	(0.0924)
Oil exports/total exports				0.0746**	0.0674**
				(0.0320)	(0.0316)
Trade openness				0.221	0.0899
				(0.135)	(0.143)
Europe					0.498*
					(0.275)
Asia					0.248
					(0.251)
North America					0.647**
					(0.286)
South America					0.125
					(0.301)
Observations	73	69	69	64	64
Adjusted R^2	0.654	0.674	0.675	0.807	0.821

Standard errors in parentheses

Dependent variable is Control of Corruption (World Bank Governance Indicators)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Immunity and corruption - Transparency International

	(1)	(2)	(3)	(4)	(5)
Immunity	0.558***	0.633***	0.696***	0.582***	0.457*
	(0.201)	(0.198)	(0.262)	(0.207)	(0.234)
Income	-1.630***	-1.318***	-1.303***	-0.903***	-1.122***
	(0.144)	(0.174)	(0.176)	(0.184)	(0.211)
Democracy		-0.368***	-0.397***	-0.272**	-0.289**
		(0.128)	(0.142)	(0.114)	(0.111)
Presidential system			-0.0155	-0.540*	-0.376
			(0.350)	(0.309)	(0.345)
Majoritarian Electoral System			0.702	0.385	0.0477
			(0.524)	(0.435)	(0.436)
Common law system			-0.227	-0.659	-0.418
			(0.511)	(0.420)	(0.446)
Press freedom				1.093***	1.076***
				(0.195)	(0.197)
Oil exports/total exports				0.129*	0.119*
				(0.0687)	(0.0674)
Trade openness				0.465	0.162
				(0.289)	(0.305)
Europe					0.958
					(0.587)
Asia					0.113
					(0.536)
North America					1.122*
					(0.610)
South America					0.0453
					(0.642)
Observations	73	69	69	64	64
Adjusted R^2	0.664	0.685	0.679	0.813	0.829

Standard errors in parentheses

Dependent variable is the corruption ranking by Transparency International

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Immunity and corruption - alternative corruption measures

	(1) ICRG	(2) WEF_diversion	(3) WEF_irreg	(4) PC1	(5) Bribes
Immunity	0.406**	0.477***	0.350***	0.791**	6.207***
	(0.173)	(0.178)	(0.120)	(0.328)	(1.956)
Income	-0.614***	-0.469***	-0.463***	-1.278***	-4.051*
	(0.181)	(0.159)	(0.108)	(0.346)	(2.181)
Democracy	-0.0322	-0.121	-0.111	-0.151	-2.212
	(0.102)	(0.115)	(0.0781)	(0.221)	(1.726)
Presidential system	-0.199	-0.454	-0.295	-0.723	-3.615
	(0.255)	(0.272)	(0.184)	(0.495)	(2.987)
Majoritarian Electoral System	-0.0411	0.412	0.523*	0.540	5.315
	(0.379)	(0.392)	(0.266)	(0.747)	(5.177)
Common law system	0.238	-0.688*	-0.532**	-0.748	-1.678
	(0.373)	(0.360)	(0.244)	(0.706)	(4.646)
Press freedom	0.463***	0.683***	0.560***	1.317***	0.0806
	(0.163)	(0.170)	(0.115)	(0.314)	(2.267)
Oil exports/total exports	0.0401	0.114*	0.0684*	0.167	-0.559
	(0.0645)	(0.0599)	(0.0406)	(0.123)	(0.885)
Trade openness	0.623**	0.327	0.277	0.728	4.501
	(0.243)	(0.248)	(0.168)	(0.459)	(3.421)
Observations	60	63	63	59	41
Adjusted R^2	0.612	0.651	0.763	0.720	0.425

Standard errors in parentheses

Dependent variables: ICRG Country Risk Guide Corruption (1),

World Economic Forum Diversion of Public Funds (2);first principal

component of 8 corruption measures (3); corruption incidence (bribes paid) in (4)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

albeit the effect is also not statistically strong. The share of Protestants in the population seems to lower corruption incidence on average and a higher share of Catholics increases it, but the confidence intervals are wide in both cases. Income levels, the strength of democracy and the immunity regime remain the dominant factors for the cross-country corruption level, and this key result remains robust across various corruption measures.

4.3   Matching regressions

In this section, we use matching techniques to compare outcomes for matched observations with low/high immunity scores as a further robustness test for the close correlation between the strength of immunity protection and corruption outcomes that was apparent in the linear regression models. This allows us to compare the effects of different immunity 'treatments' for observations matched with the same covariates. As noted above, immunity regimes are not randomly assigned so that inference cannot necessarily be interpreted as causal. In this sense, the same caveats that are common in the literature on the economic effects of institutional arrangements apply here too. However, the key identifying assumption is weaker as the effect of covariates corruption need not be linear. We construct a discrete immunity treatment variable that takes the value of 1 for countries with above and a value of zero for below average strength of immunity protection of politicians. We then match countries using the nearest neighbor method on the following covariates: income per capita, democracy score, presidential vs. parliamentary regimes, origin of the legal system and majoritarian vs. proportional electoral system. Matching on additional economic and geographic criteria yielded very similar results. As above, we used corruption perception indices from the World Bank, Transparency International and the International Country Risk Guide, as well as a measure of actual corruption incidence. In all cases the matching regressions further strengthen the view that differences in immunity treatments are closely related to corruption outcomes. The average treatment effect for those countries with above average immunity protection indicates that highly protective immunity regimes go hand in hand with higher levels of corruption. Our work focuses on constitutional rules and shows that these rules matter.

5   Accountability of Politicians and Immunity: Theory

Having quantified the politicians' immunity in stable democratic countries around the world and established empirically that they are a significant factor affecting the level of corruption and the overall quality of public governance, we now turn to a simple model to analyze the role of immunity on the behavior of politicians that is based on the accountability model of Maskin and Tirole (2004). Our goal is to analyze the effects of immunity protection on the incentives of an elected official and to uncover plausible channels through which higher immunity leads to more corruption.

In the model, a politician's immunity can be leveraged as a tool to achieve re-election because it allows

Table 6: Immunity and Corruption - Robustness Checks

	(1) Corruption	(2) Corruption	(3) Corruption	(4) Corruption (TI)	(5) Bribes
Immunity	0.295***	0.308***	0.266**	0.531**	6.087***
	(0.0962)	(0.0970)	(0.0995)	(0.216)	(2.064)
Income	-0.357***	-0.314***	-0.342***	-0.777***	-2.435
	(0.0934)	(0.103)	(0.104)	(0.226)	(2.780)
Democracy	-0.156***	-0.151***	-0.188***	-0.355***	-3.043
	(0.0538)	(0.0540)	(0.0575)	(0.125)	(1.840)
Presidential system	-0.267*	-0.284*	-0.267*	-0.555*	-3.847
	(0.144)	(0.145)	(0.146)	(0.318)	(3.287)
Majoritarian Electoral System	0.271	0.307	0.361*	0.603	5.336
	(0.202)	(0.205)	(0.205)	(0.447)	(5.163)
Common law system	-0.237	-0.249	-0.271	-0.649	-2.602
	(0.195)	(0.196)	(0.196)	(0.426)	(4.729)
Federation	-0.245	-0.306*	-0.337*	-0.652*	-0.482
	(0.160)	(0.172)	(0.177)	(0.385)	(3.770)
Press freedom	0.504***	0.512***	0.368***	0.868***	0.404
	(0.0913)	(0.0917)	(0.126)	(0.274)	(2.965)
Oil exports/total exports	0.0780**	0.0720**	0.0687**	0.117	-1.542
	(0.0320)	(0.0326)	(0.0327)	(0.0712)	(1.021)
Trade openness	0.208	0.223	0.145	0.319	2.629
	(0.134)	(0.135)	(0.140)	(0.304)	(3.622)
Ethnic fractionalization		0.333	0.337	0.660	5.941
		(0.336)	(0.336)	(0.732)	(7.880)
Religion: Catholic			0.000778	0.00272	0.00108
			(0.00182)	(0.00396)	(0.0395)
Religion: Protestant			-0.00509	-0.00916	0.0232
			(0.00341)	(0.00741)	(0.0773)
Observations	63	63	62	62	40
Adjusted R^2	0.810	0.810	0.816	0.817	0.389

Standard errors in parentheses

Dependent variable: World Bank Corruption (1-3);

Transparency (4); Bribes paid in (5)

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Immunity and Corruption - Matching Regressions

	(1) Corruption (WB)	(2) Corruption (TI)	(3) ICRG	(4) WEF_diversion	(5) PC1	(6) Bribes
SATT	0.588***	1.327***	0.893***	0.798**	1.640***	8.216**
	(0.194)	(0.423)	(0.293)	(0.317)	(0.586)	(3.301)
Observations	53	53	53	52	52	35
Adjusted R^2						

Standard errors in parentheses

SATT: average treatment effect for the treated.

Treatment variable: high/low immunity protection; see text.

Nearest neighbor matching on income per capita, democracy score,

presidential system, legal system and electoral system

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

for bribes and for other forms of corruption (favoritism, non-performance of duties) to go unpunished. As we discuss in possible extensions of the model, immunity may have multiplicative effects through unravelling: immune politicians may cover up illegal behaviors of lower-ranked public officials who may not have immunity themselves but may represent or be able to support strong interest groups.

The model consists of a politician P, a measure of voters (or a median voter V), and an interest group I. There are two policies $\{a_1, a_2\}$, and following Maskin and Tirole (2004), all voters have the same ranking of these policies, but they do not know ex-ante what the correct ranking is. The probability that a_1 is the optimal action is $p > \frac{1}{2}$; so that a_1 is the popular action. Let $\pi > \frac{1}{2}$ denote the voter's perception that the politician is congruent, that is her preference ranking is the same as the one the voters would have, if they were fully informed. The politician also chooses B which stands for corrupt or criminal activities to serve interest group I. For simplicity we assume that $B \in \{0, 1\}$. This simplification does not change the qualitative nature of our results, but simplifies the narration, as we call corrupt a politician that chooses $B = 1$, whereas we call non-corrupt a politician that chooses $B = 0$.

The probability of reelection depends both on the voters' perception that the politician made the correct policy choice and on campaign spending (or other kind of support, such as publicity, support of unions, and vote-buying) that is financed or controlled by the interest group. We model this by assuming that π is endogenous and it depends on B: it is increasing in $B: \pi(B)$. The politician faces a challenger that is perceived to have probability of being congruent π^C.

Timing: There are two periods in the game, periods 1 and 2, and a politician who cares about being reelected. Elections take place at the end of period $T = 1$. Voters at that point observe the policy choice of the politician but observe B only with some probability.

Payoffs: The interest group's payoff is increasing in B. The politician obtains utility G from choosing her preferred action and utility R from simply being in office. He also enjoys payoff $d \cdot B$ from B, where d stands for the degree of his dishonesty: if $d = 0$ the politician is "honest" in the sense that he does not

directly enjoy kick-backs from the bribes; the dishonesty level of the politician increases with d.

As in Maskin and Tirole (2004), voters care about the politician choosing the correct policy according to their preferences. The dishonesty level of politician d is not known to the voters. Voters do not care about d *per se*, but do care about the corrupt activities of politicians that are captured in the model by B. Voters will not vote for a politician that is revealed to be corrupt. The probability that corruption is revealed to the public is $\beta(B)$ which is increasing in B. Given the simplification $B \in \{0, 1\}$, we can simply speak about β, as the probability that a corrupt politician is discovered. If a politician is revealed to be corrupt at the end of period 1, he cannot be re-elected and is replaced by a new politician at $T = 2$. The second-period politician has no re-election motives and will choose the action that he perceives best. Second-period payoffs are discounted by δ.

Losing office: The incumbent can lose office either because the public's perception at $T = 2$ is low, so that $\hat{\pi} < \pi^C$, or because he is discovered to be corrupt.

Immunity: We model immunity as the probability that the politician is punished (prosecuted and/or convicted) for choosing some level of $B : 1 - q(B)$. If $q(B) = 1$, then we have the highest level of immunity, whereas if $q(B) = 0$, the politician has not immunity, if B is discovered. This is in-line with our empirical scoring where higher scores indicate greater immunity protection. If a corrupt $(B = 1)$ politician is prosecuted he faces an expected punishment $J > 0$.

Trade-offs: Higher B (bribes, corruption etc.) increase the probability of re-election because they increase financial contributions from interest groups, or they improve press-coverage, but at the same time decreases the probability of re-election. The level of immunity protection affects the relative costs and benefits of higher B.

5.1 Analysis

When the politician chooses action a_1 (respectively a_2) and B, then voters perceive that he is congruent with probability

$$\hat{\pi}(a_1, B) = \frac{\pi(B)p}{\pi(B)p + (1 - \pi(B))(1 - p)},$$

(respectively $\hat{\pi}(a_2, B) = \frac{\pi(B)p}{\pi(B)p + (1 - \pi(B))(1 - p)}$). These probabilities are increasing in B. The $T = 1$ official will hold office at $T = 2$ if (i) he is not revealed to be corrupt, which happens with probability $(1 - \beta(B))$ and (ii) he is re-elected, which has probability $\Pr(a, B) = \Pr\left[\hat{\pi}(a, B) > \pi^C\right]$, for $a \in \{a_1, a_2\}$. That is, the incumbent is re-elected if he is not prosecuted for corruption after period 1 and if he is perceived to be more congruent than the challenger.

The expressions for the probabilities that the incumbent is more congruent than the challenger, are similar to the ones in Maskin and Tirole (2004), with the main difference that π is endogenous and it depends on

B.

Given that $a \in \{a_1, a_2\}$ and $B \in \{0, 1\}$, the politician has four possible choices. We define $R(a, \hat{a})$ to stand for the benefit the politician enjoys from being in office when he chooses policy a, whereas he believes that policy $\hat{a}$ is the correct one, for $\hat{a}, a \in \{a_1, a_2\}$. We will use the shorthand notation of Maskin and Tirole (2004), denoting $R(a, \hat{a}) = R$ if $a \neq \hat{a}$, and $R(a, \hat{a}) = G$ if $a = \hat{a}$. Following, Maskin and Tirole (2004) we assume that $G > R$, that is politicians care about choosing the correct policy given their information. Suppose that the unpopular action a_2 is the correct one for the politician. Then, his payoff from choosing the popular action a_1 and corruption level B is: $R + d \cdot B + \delta \Pr(a_1, B)(1 - \beta(B)) G - \beta(B)(1 - q(B)) J(B)$, whereas his payoff from choosing the unpopular action and B is $G + d \cdot B + \delta \Pr(a_2, B)(1 - \beta(B)) G - \beta(B)(1 - q(B)) J(B)$. Note that in period 2, the incumbent politician has no re-election motives so he will always choose the policy that he prefers yielding a payoff of G. We now establish, that corruption is increasing in the level of immunity protection.

Proposition 1. *Corruption–higher B–is increasing in the level of immunity protection. Corruption also increases in the degree of dishonesty of politicians.*

Proof. For a given policy choice a the politician will be corrupt if

$$d + \delta \Pr(a_1, 1)(1 - \beta) G - \beta(1 - q) J > \delta \Pr(a, 0) G$$

or

$$d + \delta [\Pr(a, 1)(1 - \beta) - \Pr(a, 0)] G > \beta(1 - q) J$$

This inequality has the following implications: For a given d and policy a, there is an immunity threshold level q, $\bar{q}(a, d)$ beyond which the politician chooses to be corrupt $B = 1$. All else equal, higher immunity protection increases corruption. This threshold decreases in d, implying, not surprisingly, that corruption is higher if politicians are dishonest. $\square$

The level of corruption also depends on the relative desirability of policy choices: for popular policies $\Pr(a, 0)$ can be close to 1, implying that corruption does not increase the probability of re-election; it brings only material benefits to the politician if he is dishonest. In this case then, honest politicians–those with relatively low d–will not be corrupt. From these observations it follows that, ceteris paribus, corruption is higher if immunity protection is higher.

Other determinants of corruption:

It is worth investigating what other factors captured in the model increase corruption. Greater dishonesty of politicians induces corruption at lower levels of immunity protection. Another important variable is relative popularity of the policy choices. If politicians choose popular policies, they need not gain the support of interest groups to gain re-election, so if they are honest–have a low d–there will not be corruption. On the

other hand, interest groups can enable the politician implement unpopular policies by improving the voter's perception and the probability of reelection through positive publicity or vote-buying.

Summing up, corruption is higher for a fixed level of d if the immunity protection is higher, and if the interest groups are strong in the sense that their effect on the probability of re-election–i.e. the difference in $\Pr(a,1) - \Pr(a,0)$ is large. Another dimension that affects the impact of immunity in this model is the strength of opposition. Namely, π^C. If $\pi(a_1,0) > \pi^C$, then the politician can always win re-election by choosing a_1 without any bribes $B = 0$. Consequently, this will be the choice of an honest politician if he thinks that a_1 is the correct policy. However, if a_2 is the correct policy in the incumbent's view and the difference between G and R is large, the politician, even though honest, may prefer to take illegal support so that he can get re-elected despite choosing an unpopular policy that is preferable to him.

5.2 Endogenizing the type of politicians

The analysis so far has taken the honesty level of politicians d as exogenous. We now extend the baseline model to endogenize it. Suppose that there is an economy where the wage in the private sector is w. Consider an individual characterized by honesty level d, and let the expected benefit from criminal activities in the private sector be $c \cdot d - J$, where J is the expected jail cost in case of prosecution. If a person becomes a politician the consequences of corruption decrease with immunity protection: this is because he is only prosecuted if immunity is lifted which happens with probability $1 - q$. In these circumstances, who chooses to be a politician?

To answer this question, we must first analyze the occupational choices for citizens within the private sector: If $c \cdot d - J > w$, then a type d individual will choose the illegal activities. Let d^{C_1,C_0} denote the threshold level type that chooses illegal activities. Hence we get that the private citizens payoff as a function of type d is

$$U^C(d) = \begin{cases} 2(c \cdot d - J) & \text{for } d > d^{C_1,C_0} \\ 2w & \text{otherwise} \end{cases}, \tag{5.1}$$

where we multiply by 2 because there are 2 periods in the game.

We also investigate for which ranges of d politicians choose to be corrupt. Let $U^P(d,q)$ denote the maximum payoff that a type-d politician can achieve by choosing the optimal combination of a and B, that is

$$U^P(d) \equiv \max_{a,B} \{R(a,\hat{a}) + d \cdot B + \delta \Pr(a,B)(1-\beta(B))G - \beta(B)(1-q(B))J(B)\}.$$

Let $a^*(d), B^*(d)$ denote type d optimal choices.

Given that a corrupt politician's payoff (when $B = 1$) is increasing in d, for a given level of immunity protection and contemplated policy choice a, there must exist a threshold d^{P_1,P_0}, above which type d politicians

choose to be corrupt, that is

$$B^*(d) = \begin{cases} 1 \text{ for } d > d^{P_1,P_0} \\ 0 \text{ otherwise} \end{cases},$$

By looking at these expressions, we realize that once we substitute for the optimal choice of B the optimal policy choice a depends on B and $\hat{a}$ (the correct policy for the politician) and not on the d parameter of politician. Then, given $\hat{a}$, there is an optimal policy choice corresponding to $B = 1$ and one corresponding to $B = 0$. We call these policy choices a_1^* and a_0^*, we then have

$$U^P(d) = \begin{cases} R(a_1^*, \hat{a}) + d + \delta \Pr(a_1^*, 1)(1-\beta)G - \beta(1-q)J \text{ for } d > d^{P_1,P_0} \\ R(a_0^*, \hat{a}) + \beta \Pr(a_0^*, 0) R(\hat{a}, \hat{a}) G \text{ otherwise} \end{cases}. \tag{5.2}$$

The payoffs for private citizens given by (5.1) and the ones for politicians (5.2) imply that the most dishonest members of society (above d^{C_1,C_0}) choose illegal over legal work, and the most dishonest fraction of politicians–above d^{P_1,P_0}–choose corruption. Then, the question that arises is which ranges of d choose to become politicians, and how does this range depend on the level of immunity protection. This question is addressed in the proposition that follows:

Proposition 2. *More corrupt individuals choose to become politicians if there is stronger immunity protection.*

Proof. High d's choose corruption both in the private sector and in the public sector. Hence for the "high" d range we compare $R(a_1^*, \hat{a}) + d + \delta \Pr(a_1^*, 1)(1-\beta)G - \beta(1-q)J$ with $c \cdot d - J$. The private sector will be chosen if

$$c \cdot d - J > R(a_1^*, \hat{a}) + d + \delta \Pr(a_1^*, 1)(1-\beta)G - \beta(1-q)J$$

or

$$(c-1) \cdot d > R(a_1^*, \hat{a}) + d + \delta \Pr(a_1^*, 1)(1-\beta)G - \beta(1-q)J + J. \tag{5.3}$$

Define d^{C_1,P_1} as the type that makes (5.3) hold with equality. Note that because $-\beta(1-q)J + J \geq 0$, then (5.3) is only possible if $c > 1$. Given that the RHS of (5.3) increases in q, it follows immediately that d^{C_1,P_1} is increasing in the level of immunity protection.

Before we move on to our analysis we need to define an additional piece of notation. We will use d^{P_1,C_0} as the dishonesty level that satisfies $R(a_1^*, \hat{a}) + d + \delta \Pr(a_1^*, 1)(1-\beta)G - \beta(1-q)J + J = w$. Note that d^{P_1,C_0} decreases with higher q.

The main determinant of which types of individuals (less or more corrupt) choose to become politicians are the relative rewards from criminal and legal activities for private citizens and for politicians.

Case 1: $w < R(a_0^*, \hat{a}) + \beta \Pr(a_0^*, 0) G$

In this case all members of society who would choose the legitimate work, prefer to become politicians.

Case 1.1 If $w < R(a_0^*, \hat{a}) + \beta \Pr(a_0^*, 0) G$ and $1 > c$, then everyone wants to become a politician. And immunity q increases the range of corrupt politicians because it decreases d^{P_1,P_0}.

Case 1.1 If $w < R(a_0^*, \hat{a}) + \beta \Pr(a_0^*, 0) G$ and $1 < c$, then types $d > d^{C_1, P_1}$ become criminals in the private sector; types in $d \in \left[d^{C_1, P_1}, d^{P_1, P_0} \right]$ become corrupt politicians, while types below d^{P_1, P_0} become honest politicians.

In this case there is a segment of the most corrupt part of the population that chooses the private sector. This segment decreases with the level of immunity protection, as higher q increases d^{C_1, P_1} and hence enlarges the range of corrupt politicians.

Case 2: $w > R(a_0^*, \hat{a}) + \beta \Pr(a_0^*, 0) G$

In this case all members of society who would become honest politicians prefer to work in the private sector.

Case 2.1 If $w > R(a_0^*, \hat{a}) + \beta \Pr(a_0^*, 0) G$ and $1 > c$, then types above d^{P_1, C_0} become corrupt politicians, while all types below choose legitimate work. The range of corrupt politicians increases with the level of immunity protection, as d^{P_1, C_0} drops with q.

Case 2.2 If $w > R(a_0^*, \hat{a}) + \beta \Pr(a_0^*, 0) G$ and $1 < c$, then types $d > d^{C_1, P_1}$ become criminals in the private sector; types in $d \in \left[d^{C_1, P_1}, d^{P_1, C_0} \right]$ become corrupt politicians, while types below d^{P_1, C_0} become honest citizens.

In this case there is a segment of the most corrupt part of the population that chooses the private sector. This segment decreases with the level of immunity protection, as higher q increases d^{C_1, P_1} and decreases d^{P_1, C_0}, thus enlarging the range of corrupt politicians. $\qquad\square$

The lesson from proposition 2 is that in a world where occupational choices are endogenous to institutional arrangements, higher immunity protection has an adverse effect on the honesty level of individuals that choose to become politicians. The example about the Mexican legislator mentioned in the introduction is quite suggestive of this phenomenon.

5.2.1 Ability, immunity, and politics

We can further expand the model by adding an ability dimension to individuals. Let θ denote the ability of an individual and let $w(\theta)$ denote the wage for ability θ individuals in the private sector. Ability in this model affects the private sector'payoffs by determining the levels of $c(\theta) d - j(\theta)$ and of $w(\theta)$, which, in turn, determine which one of the above cases are relevant. Then, we can ask not only what level of dishonesty, but also which ability types choose to become politicians. For simplicity, we initially assume that ability does not affect the utility that a politician himself enjoys from being in office, and later discuss what happens if we relax this assumption.

Proposition 3. *If ability is relatively more important for the payoffs in the private sector, then low ability individuals choose to become politicians.*

Proof. We fix d and consider which ability levels choose to go into politics. The inequality

$$U^P(d) > 2 \max\{w(\theta), c(\theta) \cdot d - J(\theta)\}$$

will more likely be satisfied for low θ. So there is a threshold θ^P where individuals with ability levels below θ choose to become politicians. Given that $U^P(d)$ is increasing in the level of immunity protection, the threshold level of ability below which individuals choose to become politicians increases with q. $\square$

The assumption that $U^P(d)$ does not depend on θ captures well the cases where ability is relatively more important for private sector rewards compared to the utility for politicians. Of course, one can well imagine situations when this is not the case. If θ increases more $U^P(d)$ compared to its impact on $\max\{w(\theta), c(\theta) \cdot d - J(\theta)\}$, then, of course, high ability individuals choose to become politicians and this range increases with the level of immunity protection.

5.3 Related Literature

Our theoretical analysis fits into the broader literature that examines the accountability of politicians. An extensive body of political economy literature, beginning with Barro (1973) and further developed by Ferejohn (1986), analyzes how re-election influences the behavior of politicians. Maskin and Tirole (2004) show that accountable policymakers are more likely to pander to the electorate and overlook minority interests. The re-election motive for politicians is dampened if there are limits on the number of terms an individual can hold office. œ and Alt et al. (2011) examine the relationship between term length and politicians' behavior. Another branch of the literature investigates configurations where branches of government are accountable to one another, e.g. regulators or judges that are accountable to a directly elected legislature. Aghion et al. (2004) propose a model of the trade-off between delegating power to politicians and exerting control over politicians ex post. Hanssen (2004) considers the degree of accountability of judges who are appointed by elected politicians. Stephenson and Nzelibe (2010) argue that electoral accountability and institutions which provide checks and balances cannot be considered in isolation, because the checks-and-balances regime will have an effect on voter behavior. Acemoglu et al. (2012) consider the effect of checks and balances in a "weakly-institutionalized" regime where bribery of politicians is a serious concern. Accountability of officials relies on availability of information about their activities. Prat (2005), Fox (2007) and Djankov et al. (2010) discuss the advantages and disadvantages of transparency in policymaking.

6 Conclusions

In this paper, we undertake the first systematic effort to quantify the strength of immunity protection enjoyed by elected officials in stable democracies around the world. In order to gather data on immunity, we consult written constitutions, founding documents, legislative acts, case law, statutes, and legislative

rules of procedure in 74 countries on all six settled continents. The resulting "immunity score" comprises eighteen variables–six variables each for legislators, ministers, and chief executives–that measured the relative difficulty of bringing a politician to justice and reveals significant cross-jurisdictional diversity in the strength of immunity.

Our empirical investigation demonstrates that immunity provisions are strongly associated with poorer governance; stronger immunity is associated with greater corruption, bribery, and the diversion of public funds after controlling for a number of economic, political, historical, and demographic determinants and correlates of corruption. Our theoretical model illustrates how legally unaccountable politicians may attempt to enhance their chances of re-election through illegal means by supporting interest groups through lax law enforcement, non-collection of taxes, and other forms of favoritism. Interest groups return the favor through favorable propaganda, generous campaign financing, or even outright vote-buying.

The influential work of North (1990), as well as the books of Besley and Persson (2011), Acemoglu and Robinson (2012), and the therein cited research, argue that informal and formal institutions, such as the constitutional provisions that we examine here, can play a pivotal role in the social and economic prosperity of a nation. Our research uncovers serious evidence that provisions that supply politicians with immunity from criminal prosecution should be reconsidered due to their link with poor governance outcomes. This finding is particularly relevant during the ongoing fiscal crisis in Southern Europe, where substantial reforms must be enacted and implemented in a political theater dominated by interest groups that rely on and expect politicians' support.

At the same time, movements like the Arab Spring and Occupy Wall Street reveal the strong desire of younger generations, who suffer the most from high unemployment and the lack of economic opportunity, for greater transparency and accountability in government. This desire, coupled with the dire fiscal position in many countries, which was often driven by the mismanagement of public finances, amplify the possible implications of immunity and accountability.

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